

Remarks/Arguments

The following remarks are submitted in response to the Non-Final Official Action mailed October 6, 2003. Claims 1-22 remain pending in the application. Entry of these remarks and reconsideration by the Examiner to that end is respectfully requested.

In paragraph 2 of the Office Action, the Examiner rejected claims 1-14, 15-19 and 22 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. With regard to claims 1 and 15, the Examiner states that the phrase “a polarization medium positioned in proximal relation to the laser source element for polarizing the light output in a third polarization state that selects and attenuates each of the at least two polarization states equally or substantially equally” renders the claims indefinite because the claims recite only a laser source element and a polarization medium without the recitation of structure of device in order to perform how the light output in a third polarization state that selects and attenuates each of the at least two polarization states equally or substantially equally. The Examiner states that the sole recitation of a laser source element and a polarization medium in the claim fails to conform any clear polarization control optical energy source to further limit the invention as shown in Figures 3a-4c. The Examiner rejected claims 2-19 and 22 as being dependent from rejected claims 1 and 15.

After careful review, Applicants must respectfully disagree that claims 1-19 and 22 do not fully comply with 35 U.S.C. § 112, second paragraph. The primary purpose of the requirement of definiteness of claim language is to ensure that the scope of the claims is clear so the public is

informed of the boundaries of what constitutes infringement of the patent (Emphasis added). In addition, a fundamental principle contained in 35 U.S.C. 112, second paragraph, is that applicants can be their own lexicographers. They can define in the claims what they regard as their invention essentially in whatever terms they choose so long as the terms are not used in ways that are contrary to accepted meanings in the art. Applicant may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought (Emphasis Added). As noted in *In re Swinehart*, 439 F.2d 210, 160 USPQ 226 (CCPA 1971), a claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought. (see MPEP 2173.01).

It appears that the Examiner is equating claim breadth with indefiniteness. However, and as noted in *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971), claim breadth is not to be equated with indefiniteness. If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph. (see MPEP § 2173.04).

MPEP 2173.04 also states:

Undue breadth of the claim may be addressed under different statutory provisions, depending on the reasons for concluding that the claim is too broad. If the claim is too broad because it does not set forth that which applicants regard as their invention as evidenced by statements outside of the application as filed, a rejection under 35 U.S.C. 112, second paragraph would be appropriate. If the claim is too broad because it is not supported by the original description or by an enabling disclosure, a rejection under 35 U.S.C. 112, first paragraph would be

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appropriate. If the claim is too broad because it reads on the prior art, a rejection under either 35 U.S.C. 102 or 103 would be appropriate.

In the present case, claim 1 may be broad. However, this does not make claim 1 indefinite.

Claim 1 recites specific structure including: (1) a laser source element; (2) a polarization medium; (3) wherein the polarization medium is positioned in proximal relation to the laser source element so as to select and attenuate each of the at least two polarization states equally or substantially equally. This language clearly defines the boundaries of what Applicants regard as the invention. Furthermore, this language satisfies the primary purpose of the requirement of definiteness of claim language by clearly informing the public of the boundaries of what constitutes infringement of the patent. Applicants do not believe it can readily be argued that claim 1 does not satisfy these requirements. Thus, claim 1 is believed to fully comply with 35 U.S.C. § 112, second paragraph. For similar and other reasons, independent claims 15 and 22, and dependent claims 2-19 are also believed to fully comply with 35 U.S.C. § 112, second paragraph.

It appears that the Examiner would like the Applicants to include further structure in the claims to “limit the invention as shown in Figures 3a-4c” of the specification. However, there is no requirement under 35 U.S.C. § 112, second paragraph, that requires Applicants to limit their claims to illustrative embodiments shown and described in the specification.

In paragraph 4 of the Office Action, the Examiner rejected claims 1, 2, 4-7, 10-12 and 15-19 under 35 U.S.C. § 102(e) as being anticipated by Davis et al., Cohen et al., or Scott et al. Regarding claims 1, 5, 10 and 21, the Examiner states that Davis et al. suggests a polarization

controlled optical energy source. The Examiner states that Davis et al. suggests a laser source (1) that produces a light output that has one and/or both of at least two polarization states (citing Figure 3, column 4, lines 45-64); and a polarization medium (37) positioned in proximal relation to the laser source element (citing column 5, lines 1-32). The Examiner states that it is inherent that at an incident angle of the light to the medium the polarization medium will select and attenuate each of the at least two polarization states equally or substantially equally and provide linear polarization along an axis that is at about 45 degrees to both distinct polarization states (citing Figures 1 and 3).

Applicants note that this is the same rejection made by the Examiner in the Office Actions dated February 28, 2003 and September 24, 2002, which was eventually withdrawn by the Examiner and replaced with a new rejection in the Office Action dated May 20, 2003. As noted in Applicants previous responses, claim 1 recites:

1. (Previously Amended) A polarization controlled optical energy source comprising:
 - a laser source element that produces a light output that has at least two polarization states; and
 - a polarization medium positioned in proximal relation to the laser source element for polarizing the light output in a third polarization state that selects and attenuates each of the at least two polarization states equally or substantially equally.

Nothing in Davis et al. suggests a polarization medium positioned in proximal relation to the laser source element for polarizing the light output in a third polarization state that selects and attenuates each of the at least two polarization states equally or substantially equally. Instead, Davis et al. appear to minimize any polarization effects on the reflected and transmitted light. For example,

Davis et al. state: “[t]he tilted window has a metallic coating for partial reflection and for minimizing polarization effects on reflected and transmitted light.” (Davis et al., Abstract) Further, “[a]t the same time, the lateral extent of the thick dielectric must be minimized, because the optical transmission of such a thick coating will exhibit significant polarization selectivity.” (Davis et al., column 3, lines 6-9). And, “[a]ny tilted reflector results in some polarization sensitivity; however, an appropriate thickness and proper choice of materials of the metallic coating on window 37 minimizes the polarization effects.” (Davis et al., column 4, line 67 through column 5, line 3). Thus, Davis et al. appear to minimize any polarization effects on the reflected and transmitted light.

In addition, Applicants would like to point out that polarization selectivity in Davis et al. does not mean or suggest polarizing the light output in a third polarization state that selects and attenuates each of the at least two polarization states equally or substantially equally, as recited in claim 1. Rather, in David et al., polarization selectivity appears to mean selecting one polarization state over another.

Nor would it be inherent in Davis et al., as the Examiner appears to be suggesting. As noted in MPEP § 2112, the mere fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). “To establish inherency, the extrinsic evidence ‘must make clear that the

missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’ ” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (Emphasis Added).

In the present case, there is no indication whatsoever in Davis et al. that the titled window would significantly polarize the light output of the laser source. Even if it did, there is no indication in Davis et al. that the titled window actually polarizes the light output of the laser source in a third polarization state that selects and attenuates each of the at least two polarization states of the laser source equally or substantially equally, as recited in claim 1. In fact, and as discussed above, it appears that Davis et al. would actually teach away from such a construction. For these and other reasons, Applicants believe that claims 1, 2, 4-7, 10-12 and 15-19 are all clearly patentable over Davis et al.

In paragraph 6 of the Office Action, the Examiner states that Cohen et al. suggests a polarization controlled optical energy source. The Examiner states that Cohen et al. suggests a laser source (134) that produces a light output that has one and/or both of at least two polarization states (citing Figure 2); and a polarization medium (140) positioned in proximal relation to the laser source element (citing Figure 2). Again, the Examiner states that it is inherent that at an incident angle of the light to the medium the polarization medium will select and attenuate each of the at least two polarization states equally or substantially equally and provide linear polarization along an axis that

is at about 45 degrees to both distinct polarization states (citing Figure 2).

Interestingly, Cohen et al. do not mention the word “polarization” anywhere in the specification. The structure of Cohen et al. appears to be similar to that of Davis et al., and thus would appear to suffer from the same shortcomings as Davis et al. The main argument of the Examiner appears to be that it would be inherent in Cohen that at an incident angle of the light, the polarization medium will select and attenuate each of the at least two polarization states equally or substantially equally and provide linear polarization along an axis that is at about 45 degrees to both distinct polarization states.

As noted in MPEP § 2112, the mere fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82; 212 USPQ 323, 326 (CCPA 1981). “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’ ” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (Emphasis Added).

In the present case, there is no indication whatsoever in Cohen et al. that the titled window

(140) would significantly polarize the light output of the laser source. Even if it did, there is no indication in Cohen et al. that the titled window (140) actually polarizes the light output of the laser source in a third polarization state that selects and attenuates each of the at least two polarization states of the laser source equally or substantially equally, as recited in claim 1. As such, and for these and other reasons, Applicants believe that claims 1, 2, 4-7, 10-12 and 15-19 are all clearly patentable over Cohen et al.

In paragraph 7 of the Office Action, the Examiner states that Scott et al. suggests a polarization controlled optical energy source. The Examiner states that Scott et al. suggest a laser source (36) that produces a light output that has one and/or both of at least two polarization states (citing Figure 4), and a polarization medium (42) positioned in proximal relation to the laser source element (citing Figures 4, 5, 6 and 9). Again, the Examiner states that it is inherent that at an incident angle of the light to the medium the polarization medium will select and attenuate each of the at least two polarization states equally or substantially equally and provide linear polarization along an axis that is at about 45 degrees to both distinct polarization states (citing Figures 2, 4, 5, 6 and 9).

Like Cohen et al., Scott et al. does not even mention the word “polarization” anywhere in the specification. The structure of Scott et al. appears to be similar to that of Cohen et al. and Davis et al., and thus would appear to suffer from the same shortcomings. The main argument of the Examiner appears to be that it would be inherent in Scott et al. that at an incident angle of the light, the polarization medium will select and attenuate each of the at least two polarization states equally

or substantially equally and provide linear polarization along an axis that is at about 45 degrees to both distinct polarization states.

As noted in MPEP § 2112, the mere fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’ ” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (Emphasis Added).

In the present case, there is no indication whatsoever in Scott et al. that the titled window (42) would significantly polarize the light output of the laser source. Even if it did, there is no indication in Scott et al. that the titled window (42) actually polarizes the light output of the laser source in a third polarization state that selects and attenuates each of the at least two polarization states of the laser source equally or substantially equally, as recited in claim 1. As such, and for these and other reasons, Applicants believe that claims 1, 2, 4-7, 10-12 and 15-19 are all clearly patentable over Scott et al. For similar and other reasons, dependent claims 3, 8, 9, 13 and 14 are also believed to be

clearly in condition for allowance.

Finally, Applicants would like to remind the Examiner that the Examiner cannot ignore any of the claim language, including the language “a polarization medium positioned in proximal relation to the laser source element for polarizing the light output in a third polarization state that selects and attenuates each of the at least two polarization states equally or substantially equally” (Emphasis Added). Rather, in order to properly reject these claims, the Examiner must produce art that shows by itself or in combination *each and every element of the claim*.

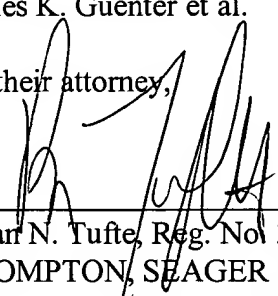
Having thus addressed the Examiner’s grounds for rejections, Applicants believe pending claims 1-22 are clearly in condition for allowance. Reconsideration to that end is respectfully requested. If a telephone conference might be of assistance, please contact the undersigned attorney at 612-677-9050.

Respectfully submitted,

James K. Guenter et al.

By their attorney,

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Brian N. Tufte, Reg. No. 38,638
CROMPTON, SEAGER & TUFTE, LLC
1221 Nicollet Avenue, Suite 800
Minneapolis, MN 55403-2402
Telephone: (612) 677-9050
Facsimile: (612) 359-9349